

Notice of Allowability

Application No.

09/895,213

Applicant(s)

YOSHII ET AL.

Examiner

Johannes P Mondt

Art Unit

2826

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Responses (filed 8/6/3 and 8/8/3) to Ex Parte Quayle of 6/30/3.
2. ☒ The allowed claim(s) is/are 1, 12, 13, 15-18 and 20-22.
3. ☒ The drawings filed on 06 August 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No. _____.
 - (b) ☐ including changes required by the proposed drawing correction filed _____, which has been approved by the Examiner.
 - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet.

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892) | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3 <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____. |
| 5 <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. <u>Aug3.</u> | 6 <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9 <input type="checkbox"/> Other |

DETAILED ACTION

Response to Amendment

Amendment filed 8/6/3 in response to Ex Parte Quayle Action mailed 6/30/3, in conjunction with telephonic interviews as summarized in Interview Summaries of 8/3/3 and 8/13/3, and submitted changes to the Drawings (8/8/3) form the basis of this Office Action. Said Amendment, being recognized as a bona fide attempt to improve the claim language by removal of informalities without substantially changing the claim content, is herewith entered. However, corrections to the claim language are necessitated by said amendment (see below under Examiner's Amendment).

Information Disclosure Statement

The examiner has considered the item listed on the Information Disclosure Statement filed 8/8/3 (please see signed copy of Form 1449 included in this Office Action).

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Lawrence Cullen (Reg. No.: 44,489) on September 25, 2003.

Claim 12: the word "grade" (line 2) has been replaced by the word "graded".

Claim 13: the word "grade" (line 2) has been replaced by the word "graded".

Claim 14: has been cancelled.

Claim 15: the verbiage "of claim 14" (lines 1-2) has been replaced by "of claim 1".

Claim 19: has been cancelled.

Drawings

2. The drawings for Figures 17-20 containing the required "Prior Art" label were received on 8/6/3. The requirement of a change in Figure 1, as formulated in the Ex Parte Quayle Action of 6/30/3, is herewith withdrawn, with reference to the Interview Summary of 8/13/3.

Allowable Subject Matter

3. ***Claims 1, 12-13, 15-18 and 20-22*** are allowed.

4. The following is an examiner's statement of reasons for allowance:

Neither the Prior Art as Admitted by Applicant nor Fujii et al nor Duncan as cited in the rejection in Paper No. 13 (Final Rejection) teach the base electrode to be electrically connected to the third semiconductor layer via the graded composition layer and the active layer. Furthermore, Katoh (5,010,382) (cf. Information Disclosure of Paper No. 14 mailed with the Ex Parte Quayle Action on 7/2/3) does not disclose the base electrode to provide an electrical connection to the third semiconductor layer either because the active layer in applications of the heterojunction bipolar transistor is the interface between layers 3 and 4a (cf. col. 6, lines 13-33) and is located in the mesa

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rather than along the path connecting the base electrode 6 (cf. col. 7, line 68), therefore not being a chain in the aforementioned electrical connection.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Johannes P Mondt whose telephone number is 703-306-0531. The examiner can normally be reached on 8:00 - 18:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J Flynn can be reached on 703-308-6601. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JPM
September 24, 2003